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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,262	10/07/2003	Michael A. Horswill	84701 3029 Gnn	3125
20736	7590	03/29/2005	EXAMINER	
MANELLI DENISON & SELTER 2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307				CASAREGOLA, LOUIS J
ART UNIT		PAPER NUMBER		
		3746		

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/679,262	HORSWILL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Louis J. Casaregola	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10/7/03 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

***Objection To Drawing***

The drawing in this case is objected to under 37 CFR § 1.84(p) for the following reasons:

The drawing reference characters are not used consistently in related drawing figures; element 56 in Figure 3 appears to be the same as element 82 in Figure 4, element 63 in Figure 3 appears to be the same as element 86 in Figure 4, element 70 in Figure 3 appears to be the same as element 74 in Figure 4, etc. This list of errors is merely exemplary and not exhaustive, and it is applicants' responsibility to completely edit the drawings so that the reference characters are used consistently throughout all drawing figures.

***Claim Rejections - 35 USC § 112***

Claims 1-13 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The invention in this case is a control apparatus and the present claims recite numerous control features as means-plus-function limitations. Such limitations though permitted under the 6th paragraph of § 112 must still have a definite scope as required by the 2nd paragraph of § 112. Each claimed means must read on a specific element

(or elements) in the disclosed embodiment of the invention such that the scope of the each means clearly corresponds to the disclosed element and its known equivalents. In this instance, however, many of the claimed means are indefinite since it is unclear how they are intended to correspond to the structural elements actually shown in the disclosed embodiment.

The indefinite mean-plus-function limitations in claim 1 and related dependent claims 2-13 include:

“means for receiving a signal representative of the desired thrust...” (claim 1, lines 4-5),

“means for receiving a signal representative of the actual thrust...” (claim 1, lines 6-7),

“means for analysing the above signals...” (claim 1, line 8),

“means for receiving a signal representing a desired fuel flow” (claim 1, lines 12-13),

“means for providing a signal...” (claim 1, line 14),

“fuel monitoring means...” (claim 1, line 14)

“means for receiving a feedback signal...” (claim 1, line 16),

“means for analysing the signal...” (claim 1, line 18),

“protector means...” (claim 7, line 3),

“protector means...” (claim 8, line 2),

“means for receiving a signal representing engine thrust...” (claim 8, lines 2-3),

"means for calculating a maximum desired fuel flow..." (claim 8, lines 5-6),

"means for determining..." (claim 10, line 2),

"means for reducing or preventing fuel flow..." (claim 10, lines 5-6),

"fuel monitoring means..." (claim 11, line 2), and

"fuel monitoring means..." (claim 12, line 2).

The disclosed invention is shown primarily in Figures 3 and 4 as a series of rough schematic components many of which lack reference characters or labels, and the related discussion in the specification fails to establish any clear correspondence between the components shown and the claimed "means" listed above. The above listed "means" are therefore considered indefinite as to scope, and applicants' response to this rejection should specifically point out how each claimed means is intended to read on disclosed embodiment of the invention.

### **References**

The references submitted in applicants' Information Disclosure Statement are noted, and Loft et al, Corbett et al, and Walker et al are cited as disclosing further pertinent examples of prior art fuel control systems. In view of the indefinite nature of the claimed subject matter, however, the reference material cannot be applied at this time.

L. J. Casaregola  
571-272-4826 (M-F; 7:30-4:00)  
703-872-9306 FAX  
March 21, 2005

*L.J. Casaregola*  
LOUIS J. CASAREGOLA  
PRIMARY EXAMINER

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Cheryl Tyler, can be reached at 571-272-4834.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).